Referring to the paragraph of the report in which it is suggested that the future of Queen's depends upon its ability to develop "the Ann Arbor type of school," the faculty contrasts the conditions of the two schools,—Ann Arbor, 14,000 inhabitants, one hospital, 389 students: Queen's, 20,000 inhabitants, three hospitals, 225 students—and claims that "A more careful inspection of our clinical work, both as to amount and methods, would prove that we do a great deal more for our students than is done at Ann Arbor, and do it equally well. The faculty has recognized for a long time the limitation of our clinical facilities and has, through organization . . . gradually increased the number of cases available till now we consider the number adequate." Dismissing, in two curt sentences, the suggestion that Queen's might maintain a two-year school, the faculty is inclined to place more importance on the fact that Dr. Colwell has included Queen's in Class A, since this gives the school "its proper place and standing from a general view of its equipment and facilities, and does not presume to estimate its future from what could only be a most superficial appreciation of local conditions."

## HALIFAX MEDICAL COLLEGE

THE report on medical education in the United States and Canada presented to the Carnegie Foundation for the Advancement of Teaching, by Mr. Abraham Flexner, is a document of very great interest and of permanent value. Rumour has from time to time come to us of the flimsy character of the education given in some medical colleges of the United States, but in the pages of this report we read of conditions almost incredible, and it is made quite plain that there are in that country medical colleges whose teaching is a sham. The fearless and outspoken way in which the report deals with these will, we trust, lead to their extinction.

The report urges many reforms; indeed, it may be said that its proposed reconstruction of the basis of medical education is revolutionary, for it advocates the reduction of the number of centres of medical study in the United States, now over one hundred and fifty, to thirty. But reformers are frequently over zealous, and revolutions are seldom carried out without inflicting injury to some who do not deserve it.

From various quarters protests have been heard against the sweeping statements of the report. We believe that in some cases injustice has been done, and in one case we know it has been done. Nowhere has the report made more stir than in Nova Scotia and in the other Maritime Provinces, where a large number of the medical practitioners are graduates of the Halifax Medical College and of Dalhousie University. The report states that the Halifax Medical College "has no function," and scornfully questions the value of the Dalhousie degree in medicine.

The Halifax Medical College began its career nearly fifty years ago as a medical faculty of Dalhousie University, but there were difficulties in the way of securing a government grant in aid of the medical faculty of the university, while a grant could be secured for the college as an independent institution, and so a separation was effected. Still, a more or less intimate relation has continued; the teaching in biology, chemistry, and physics is given by the university, and the great majority of graduates of the Halifax Medical College take the M.D. degree of Dalhousie University. With the insinuation against its bona fides the university is quite able to cope, but its relation to the Carnegie Foundation must determine its reply and its future action.

In view of the fact that so large a proportion of the medical men in practice in Nova Scotia are graduates of this school, and among them are many practitioners of outstanding ability, it is small wonder that a feeling of surprise and resentment should be caused by this report, coming as it does with very weighty authority, and going, as it will, in the pages of

magazines and newspapers, to all parts of the country. All these men are discredited in the eyes of the public; all present students of the college must fear that their time has been thrown away; and that they cannot face the public with the credentials of a school so disparaged and condemned.

For a dignified and trenchant criticism of the report, as it affects the Halifax school, we may refer our readers to a paper read by Dr. D. A. Campbell at the annual meeting of the Nova Scotia Medical Society, published in the Maritime Medical News in July, and reprinted in the Montreal Medical Journal in its September issue, together with the discussion of Dr. Campbell's paper, and the resolution adopted by the society to the effect that "the report is prejudiced, inaccurate, and misleading," and that the school should be continued.

We proceed to show reason why the report was criticised as "prejudiced, inaccurate, and misleading." The dissecting room is described as "ordinary," and "ill-smelling." The Halifax Medical College makes no claim to be superior; it claims to do good, average work with ordinary apparatus. As to the charge of being ill-smelling, we have not heard that a dissecting room should have the atmosphere of a rose garden. We have never in this country, in Europe, or in the United States, visited an inodorous dissecting room, and we are quite sure that the great anatomists of the past, who laid the foundations of the science, would not have been dissatisfied with conditions in the Halifax Medical College, where the dissecting room is large, well lighted, and well ventilated. The ill odour is to be regretted; it seems to have checked further investigation into the anatomical department. investigation would have shown that there is an abundant supply of properly prepared and injected cadavers, that every student receives a full set of bones (a fact carefully noted to the credit of the wealthy Cornell), and that the professor of anatomy, a methodical enthusiast, devotes several hours every day to the work of his department. The disparagement of the anatomical department is perhaps the most bitterly resented part of the report.

The laboratory is pronounced "utterly wretched," and this uncalled for epithet is repeated and reiterated in other parts of the report. Expressions of this sort do not indicate serene judgement, but they make the report more lively reading. The laboratory is by no means wretched. The room is amply large enough and better lighted than the average room devoted to microscopic work. It is true that three classes are conducted in it, but not at the same hour, and there is no interference. The report mentions that the laboratory is connected with the Provincial Board of Health, but fails to note the great advantage of such a relationship. Plain, even meagre, the apparatus may be, but all the essential work of a laboratory is carried on there, from the preparation and examination of morbid tissues and the culture of microorganisms to the preparation of vaccines.

In discussing laboratory teaching the report classes the Halifax Medical College with such "colleges" as the Mississippi Medical College which does not "own a dollar's worth of apparatus of any description whatsoever"; with the Chattanooga Medical College, where with one hundred and twelve students the dissecting room has only two tables and the "laboratory," one microscope; with Toledo which "has nothing which can be dignified with the name of laboratory," and where "no charts, bones, skeletons" are in evidence; with the Detroit Homœopathic College which has thirty-four students and thirty-five teachers, and laboratory facilities described as "wretched," and with Kansas where the dissecting room "did duty incidentally as a chicken yard."

Then the charge is made of mercenary motives. In over eighty per cent. of the medical schools of North America the income depends on fees alone. In the great majority of these a large portion of the income is paid to the instructors. And until the public is alive to the importance of medical education, and willing to endow medical teaching and research, there is no other practicable method. It is evident that the system is one which may easily degenerate into the worst commercial-

ism, as it has evidently done in the United States, and we are glad to see the courageous way in which the report denounces these bogus colleges.

But there is a great gulf between the Chattanooga Medical College, for example, where the "dean" draws more than a third of the total fees, and the Halifax Medical College where the average "honorarium" to the instructors does not come to \$100. The commissioners who visited the Halifax Medical College did not make themselves acquainted with the personnel of the teaching staff, or they would have seen the absurdity of supposing that men with so many calls on their time could be tempted by the paltry dividends accruing from fees, and these often spontaneously and cheerfully held back for years while the money was being applied to the improvement of the college.

The attitude of the Carnegie commissioners to the Halifax Medical College and other institutions calls for comment, however, on other grounds than these. It is not in this country only that the question of medical education is approaching an acute phase. The raising of the entrance qualifications, the vast expense of modern laboratories, the prolongation of the course, are all proofs of the conviction that our methods are not perfect. And everywhere men enter into "great argument" about this great subject, but evermore come out by the same door as in they went. And the door is that of exchequer.

The report admits the "patent fact that students tend to study medicine in their own states." There are geographical, as well as financial, reasons for the existence of the Halifax Medical College. It is situated eight hundred miles from the nearest first-class centre of teaching in Canada. It is a small school in a comparatively poor country. And the government is not yet ready to endow medical education. Perhaps, if they could absorb the ideas of the Carnegie Foundation, they may yet do so. Until then the question of finance must govern the situation.

It is difficult to speak of this subject without being misunderstood. We are in hearty sympathy with the idea of the commissioners to secure the most efficient teaching of medicine, and perhaps still more with the endeavour to raise the standard of the preliminary education of those who enter on the study of medicine. But some of us are inclined to think too much stress is at present laid on elaborate furnishing and extensive apparatus, too much demanded of the student in what may be called transcendental details, for the demonstration of which expensive apparatus is necessary.

In medicine, as in any other science, the student must take the word of the teacher for some things: the years of a Methuselah are not sufficient to verify all his facts for himself. We believe very good teaching may be given with very little apparatus. Many of the smaller colleges may be inadequate in outfit, yet not, therefore, incompetent.

A few years ago the professor of physics in Dalhousie University carried on his work with a scanty supply of apparatus which would have been sadly inadequate in the laboratory of a Kelvin or a Kohlrausch. But with this slender equipment Gordon MacGregor not only taught and inspired men who now hold important positions in many places, but did original work of a stamp that won the admiration of the leading physicists of Europe and America, and placed him in the chair made illustrious by Tait in Edinburgh.

While we admit to the full the defects due to local conditions, we feel that the verdict of the report is unfair, and we fear it has dealt the college a fatal blow. No student will continue to come, no parent will send his son to an institution so discredited. And without students and the fees they bring the college must fail.

In our opinion there is only one door of hope. Is the door open for a return to the university of Dalhousie? Can the university raise the endowment? Will the medical college regain its ancient nest amid the green and vigorous branches of that sturdy tree, or, bowing to the delenda est of

Mr. Carnegie, droop and die? This is a question which every graduate of Dalhousie or the Halifax Medical College, who has a dollar in his pocket, may help to answer.

## STYLE IN MEDICAL WRITING

IT has not escaped notice that all important scientific observations have been recorded with a singular fitness of words. The best scientists have been the best writers upon science. Huxley, Tyndale, and Osler are good writers of English, because the style of each is inseparable from the man. His way of writing is part of himself, since a pen is not a machine which proceeds automatically, once it is set in motion. It must be governed by a hand which, in turn, is directed by a mind.

There are three kinds of writers: those who never think at all; those who think only as they write; and those who have thought before they take the pen in hand. Careful observers belong in the last category, and that is the reason why they write so well. Poor writers employ phrases. Good writers employ words; and they compel each word to give a proper account of itself. They put it to the question. They scrutinize it with the same care as they exercise towards the fact which they propose to describe. If it is weak, or worn, or superfluous, they cast it aside, as a good craftsman rejects imperfect material. Their writing, then, has symmetry and strength, and fitness for the work which it is intended to perform.

On the other hand, loose and slatternly writing is a mark of a slovenly habit of mind. Sheer laziness will produce the same result, since easy reading is hard writing. The trade of the pen must be learned, and he who is not willing to practise it, at first for the fire, has no right to take into his hand that obstinate and refractory tool. It is easy to pour out a flux of words. It is difficult to range them in order, and